BROADBAND EXPANSION GRANT APPLICATION For Fiscal Year 2022

Primary Applicant (Name and Address):	Applications MUST be UPLOADED to ERF via the
	Commission's website,
Siren Telephone Company	http://psc.wi.gov/apps35/ERF_upload/content
7723 Main Street	/mymenu.aspx. Refer to section 2.3 for detailed
PO Box 426	instructions.
Siren WI 54872	
	Applications are due and MUST be uploaded to ERF no
In partnerships with the Burnett County Development	later than: March 17, 2022 at 4:00pm (16:00) Central
Association	Time. Late applications will not be accepted.
	Contact for further information:
	PSCStatebroadbandoffice@wisconsin.gov
	Date:
	December 1, 2021

The Public Service Commission of Wisconsin is seeking applications for Broadband Expansion Grants. The Commission may award one or more grants during Fiscal Year 2022 to public and private entities that meet the eligibility requirements set forth in Wis. Stat. § 196.504. This grant round will be funded with bond proceeds authorized by the Wisconsin Building Commission pursuant to Wis. Stat. § 13.48(30). As such, successful applicants are subject to the requirements of Wis. Stat. § 13.48(30). Successful applicants will demonstrate a clear and achievable plan to improve broadband communications services in one or more underserved areas in the State.

Applicant Certification: In signing this application, the undersigned verifies under penalty of perjury that the Applicant and its employees and agents have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition with respect to this application; that no attempt has been made to induce any other person or firm to submit or not to submit an application; that this application has been independently arrived at without collusion with any other proposer, competitor or potential competitor; that this application has not been knowingly disclosed prior to the opening of applications to any other applicant or competitor; that all of the responses and representations of Applicant in this application are true and correct to the best of the undersigned's knowledge, information, and belief; and that Applicant agrees to, accepts, and will comply with all of the terms and conditions respecting this application and any award of a broadband expansion grant as may be established in a grant award Agreement.

Title	Phone ()
President/GM	(715) 349-2224
March 17, 2022	
	President/GM

SUMMARY OF FY2022 GRANT APPLICATION

Primary Applicant Name Siren Telephone Company	Amount of Broadband Grant Request (round to nearest dollar) $\$473,850.50 \ (50\%)$				
Federal Employer Identification No. 39-0933212	Amount of Matching Funds Pledged (round to nearest dollar) \$473,850.50 (50%)				
Contact Name and Title Sid Sherstad	Total Cost of Proposed Project (round to nearest dollar) \$947,701				
Telephone Number (715)-349-2224	Project Name Webb Lake and Big Bear Lake Fiber				
E-mail Address(es) (715)-349-2224	Type of Proposed Broadband Service (FTTH, Cable, DSL, etc.) Fiber to the Premises (FTTP)				
Grant Manager, if different than Primary Applicant	Grant Manager Federal Employer Identification No.				
Grant Manager Contact Name	Grant Manager Email Address and Telephone Number				
The Burnett County Business Development Association	mes, addresses, and FEINs of the partner companies or organizations on has contributed \$5,000 to this project. Despite significant neetings, municipal schedules prevented completion of a Public				
Bring First FTTP to the Webb and Big	Bear Lakes Area Communities				
Maximum Proposed Download Transmission Speed FTTH: 1 Gbps and faster	Maximum Proposed Upload Transmission Speed FTTH: 1 Gbps and faster				
Minimum Proposed Download Speed Available To Purchase FTTH: 30 Mbps	Minimum Proposed Upload Transmission Speed Available To Purchase FTTH: 30 Mbps				
County or Counties served by this project	Community or Communities served by this project				

Town of Webb Lake

Burnett County

Does proposed project serve an <u>unserved</u> area of the State, as defined in <u>Section 1.4</u> of the application instruction? (yes/no)	Is the Applicant certified as a Broadband Forward! Community or Telecommuter Forward! Community, or does the grant project propose to serve a Broadband Forward! Community or Telecommuter Forward! Community? (yes/no) No
For last mile projects or component the expected number of Business Locations that will have access to the improved broadband service (i.e., total business locations passed or with new service access). 1 Before counting in-home and work-at-home	For last mile projects or components the expected number of Residential Locations that will have access to the improved broadband service (i.e., total residential locations passed or with new service access). 130
Of the improved business locations, how many locations are unserved?	Of the improved residential locations, how many are <i>unserved</i> ? 5
For providers that are eligible telecommunications carriers will the proposed broadband service be available to Lifeline customers? (yes/no) Lifeline-only ETC Designation is under	Are there any programs available for low-income households to access low-cost service or discounts? (yes/no) Yes. Affordable Connectivity Program
consideration for 2023	(ACP)
Is the internet service provider currently participating in the Emergency Broadband Benefit Program? (yes/no) Yes. ACP will be available throughout	Is the internet service provider currently participating in the Department of Public Instruction and CESA purchasing's Digital Learning Bridge? (yes/no) Yes
Did the internet service provider participate in the Public Service Commission's voluntary Broadband Coverage Data Collection in 2012? (yes/no) $Yes.$	

Table of Contents

Summary of Project Budge and Funding Statement	Page 2
Executive Summary	Page 4
Mandatory Application Requirements	Page 5
Exhibit A – Maps of the Proposed Service Area	Page 18
Exhibit B – History of Siren Telephone Company	Page 19
Exhibit C – Construction Costs	Page 20
Exhibit D – Letters in Support of this Application	Page 21

Summary of Project Budget and Funding Statement – Cost Categories

FY22 Broadband Expansion Grant Application Budget & Income Summary



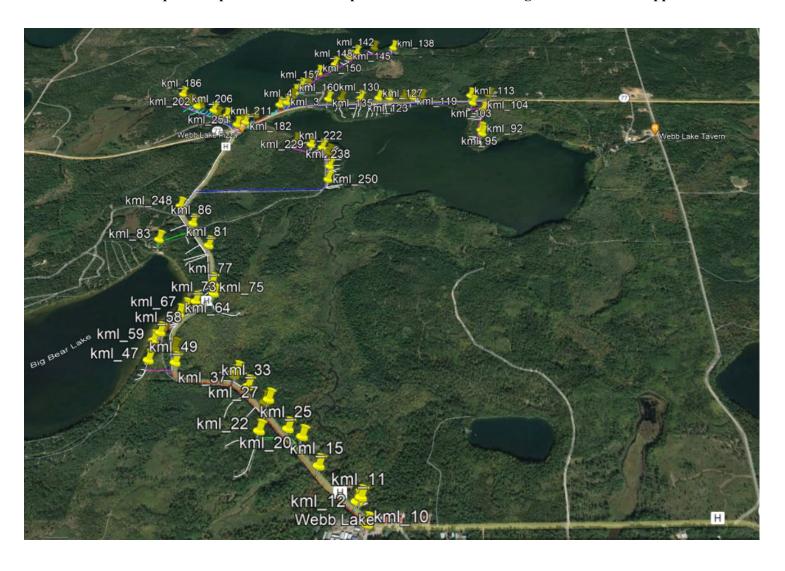
Please complete this form using Microsoft Excel. A PDF copy must be attached to your application as page four. In addition, this form must also be uploaded to ERF in Excel format.

	Grant Summary						
Grant A	Grant Applicant: Project:						
	Siren Telephone Company		Webb	Lake	and Big Bear Lak	e Fib	er
	Budget						
Line:	Description / Category:	Gı	rant Funds:		Match:		Total:
1	Contractual, Consultant Fees	\$	448,993.00	\$	448,993.00	\$	897,986.00
2	Equipment	\$	15,000.00	\$	15,000.00	\$	30,000.00
3	Supplies					\$	-

	1 , 0 ,						
1	Contractual, Consultant Fees	\$	448,993.00	\$	448,993.00	\$	897,986.00
2	Equipment	\$	15,000.00	\$	15,000.00	\$	30,000.00
3	Supplies					\$	-
4	Labor (Salary, Fringe)	\$	9,857.50	\$	9,857.50	\$	19,715.00
5	Permitting, Licensing Fees					\$	-
6	Travel					\$	-
7	Other					\$	-
	Totalı	\$	473,850.50	\$	473,850.50	\$	947,701.00
	Total:	50.0% match requested					

	Pledged Contributions						
#:	Entity:	Entity Type:	Pledge Type:		Pledge:		
1	Siren Telephone Company	Applicant	Cash	\$	468,850.50		
2	Burnett County Development Association	Partner	Cash	\$	5,000.00		
	Total:						

Maps of Proposed Broadband Expansion in the Webb and Big Bear Lake Area Application



Executive Summary of the Webb Lakes Area Application

Siren Telephone Company proposes to bring the first Fiber-to-the-Premises (FTTP) deployment to growing communities along and adjacent to the shores of Webb Lake and Big Bear Lake, located in rural Burnett County

Siren requests a grant in the amount of \$473,850.50 and would provide matching in the amount of \$473,850.50 (50% match) to complete this \$947,701 project reaching a total of 130 current subscriber locations by the end of 2023.

Siren is expecting an initial take rate of 70% in the first 12 months following completion of the project and 90% by the end of 36 months, as with our completed state broadband grant awards.

Serving the lakes area targeted in this application provides a unique opportunity to bring jobs to rural Burnett County, which has unemployment ranked 66th among Wisconsin's 72 counties in the fall of 2019, and 51st in median household income in the most recent census.

The Webb and Big Bear Lakes area is also a county center of summer tourism, with a great opportunity to build a reputation for conversions to year-around occupancy and winter outdoor activity. It is commonly said in this neighborhood that its residents "can't stay during the week because they can't work," with no high-speed internet service available and spotty cell phone access at distances away from the Interstate.

This application includes areas reported to us as "unserved" according to subscribers located along the northern shore of Webb Lake according to the PSCW Broadband Map viewed on March 14, 2022. Local residents tell us many more locations cannot get reliable summer internet service at a speed of 5 Mbps during the summer months. This application is further supported by a history of requests asking Siren to offer long-term solutions to local area residents unable to obtain high-speed broadband from incumbent providers of landline and wireless services.

Siren Telephone Company has a long history of service to the people of Burnett County. It began offering telephone service from a farmhouse on state Highway 70 near Viola and Big Sand Lakes, in the year 1910. Service was available whenever members of the family were in the house to answer calls. The Company has maintained a strong financial history since those days, and has been the past recipient of two Wisconsin state broadband expansion grants bringing fiber-based broadband to underserved rural areas.

The Burnett County Business Development Association has contributed \$5,000 to this application.

Mandatory Application Requirements

3.2.1 Applicant identification and contact information

a. The name and address of the entity applying for the grant, and the mailing address, telephone number and email address of one or more contact persons representing the applicant.

Name of Entity: Siren Telephone Company, Inc.

Mailing Address: 7723 Main Street, PO Box 426, Siren WI 54872

Telephone Number: 715-349-2224

Contact: Sid Sherstad, President/General Manager

b. If the application proposes a public-private partnership, the identity and contact information for all application partners.

This Application does not propose a Public-Private Partnership due to time constraints, but does benefit from continuing assistance from local municipal governmental units

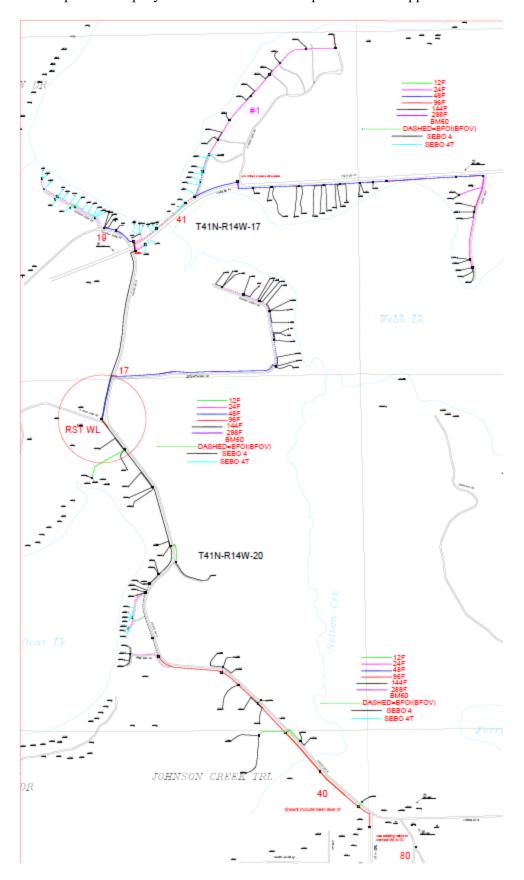
c. The application must show that the applicant is an organization, a telecommunications utility, or a city, village, town, or county that has established a legal partnership or joint venture arrangement with an otherwise qualified organization or telecommunications utility, and as such meets the eligibility requirements set forth in Wis. Stat. § 196.504(1).

Siren Telephone Company Inc. is an Incumbent Local Exchange Carrier certified to provide telecommunications service in the State of Wisconsin pursuant to Section 196.50(2)(b) of the Wisconsin State Statute.

Siren Telephone Company (PSCW Utility #5490) provides services to the Siren, Wisconsin exchange (Study Area Code 330949).

3.2.2 Description of the project

a. A static map and description of the area of the state that will be affected by the proposed project.



Siren Telephone Company - FY2022 Broadband Expansion Grant Application - Webb Lake Fiber

Siren proposes to build a fiber-based ring infrastructure offering Fiber-to-the-Premises (FTTP) broadband internet services to 130 locations surrounding the residential areas along the shores of Webb and Big Bear lakes.

Maps of the construction area are provided in **Exhibit A**, below.

The map should be accompanied by:

- A URL reference to a spatial file (Geodatabase / Feature Class (ideal), or Shapefile or KML) showing the proposed service area. A spatial file including
 census blocks that intersect the proposed project area is also acceptable.
- If mapping software is not available, provide a tabular file (spreadsheet format) with either, a list of address ranges or a list of census blocks within the
 proposed project area.
- If neither a spatial file nor a spreadsheet is available, providing a map using Google Maps with the boundary of the project area drawn onto the map is
 acceptable.
- PSC staff can provide support to ensure an accurate spatial file is delivered to the Commission. Please contact the State Broadband Office mapping team for mapping assistance at PSCBroadbandData@wisconsin.gov.
- b. If the project area lies within a census block designated as served on the PSC Broadband Map, provide additional documentation to demonstrate the actual broadband service that is available in the proposed project area.

The proposed service area includes approximately 20 locations shown as served on the PSCW Broadband map viewed on March 14, 2022. However, residents in these areas tell us this is not the case. These locations have CenturyLink as their incumbent provider, but cannot get anywhere near th 25/3 Mbps. This could be the result of distance from copper facilities, or coverage that does not include all locations in census blocks proposed in this application. T-Mobile terrestrial wireless internet is the second carrier in the area. With all of the year-around tree cover, no residents in the proposed project area thought there was any chance of obtaining service from a wireless provider.

C. An explanation of how the proposed project will increase broadband access.

This project will add 130 current residential locations to the state's count of fiber-based broadband internet services. This will cause other nearby locations to seek the same from Siren Telephone Company and other providers who are willing to build in this area.

The proposed project area for this application is otherwise shown as "eligible", according to the Wisconsin Broadband Map viewed on March 14, 2022.

Siren telephone Company will build full Fiber-to-the-Home broadband internet connections which promise immediate symmetric Gig internet connectivity. These connections should last many decades bringing work, school, telemedicine and social activities to every home, in-home and standalone business along the reliable fiber backbone.

This proposed project increases broadband access as follows:

- Potential and expected number of households served, including number of unserved and underserved locations.
- Potential and expected number of businesses served, including number of unserved and underserved locations.
- Expected number of seasonal residents and tourists served.
- Estimated download and upload speed of the broadband service packages available for purchase
- 1) Provides Fiber-to-the-home (FTTH) high speed broadband and Internet access to areas where no fiber-based broadband, or advertised copper-based speeds, are available or planned to reach to end user customers in the proposed service area. FTTH connections offer faster, more reliable access to higher speeds that are not limited by existing copper facilities.

And unlike terrestrial and satellite wireless connectivity, Siren's FTTH solution will always be available—not until the dense tree cover of the Lakes area grows even a few feet taller, or antennas ice-up..

2) Provides broadband services well above the currently-defined 25/3 Mbps minimum with the ability to deliver practically unlimited (for example, 1 Gbps) broadband speeds using initiallydeployed fiber and electronics in every home, business and public location to be served. The incumbent provider does not face any requirement to provide facilities necessary to reach these speeds under the FCC's CAF II Order, and therefore, is highly unlikely to do so.

Whereas existing copper-based infrastructure is old and not well supported, the addition of now fiberbased facilities can be expected to last 30 to 50 years or more into the future with no additional expenses to maintain the fiber.

d. A statement whether the proposed project is targeting the "last mile," "middle mile," or backbone portion of the broadband infrastructure.

The proposed project includes backbone and last mile fiber facilities. The project is an extension of Siren's existing redundant fiber ring system, with dedicated backbone, distribution, feeder and drop fiber to premises.

No middle mile infrastructure costs are included in this application.

Siren Telephone currently maintains sufficient middle mile and backhaul facilities and capacity on its existing backbone ring network to deliver all proposed and future last mile subscribers in the area.

e. A description of the broadband service to be provided, including estimated download and upload speeds, whether the speed is based on dedicated or shared bandwidth, and the technology that will be used. This description may be illustrated by a map or schematic diagram, as appropriate.

Siren Telephone will provide its broadband service exclusively using a fiber-to-the-home network. This fiber network is a like-engineered extension of the company's existing fiber network, currently in place and used in Siren's regulated service territory. The same technologies will be used to provide the highest quality of service to all new customers' services in this application.

All broadband electronics used to provide broadband services will be managed to the same standards as those in the Siren regulated service territory.

Siren plans to offer broadband services at these prices in the proposed service area:

30 Mbps Downward / 30 Mbps Upward	\$ 60.15 per month
50 Mbps Downward / 50 Mbps Upward	\$100.15 per month
100 Mbps Downward /100 Mbps Upward	\$150.15 per month
1 Ghns Downward /1 Ghns or faster Unward	ICB

1 Gbps Downward /1 Gbps or faster Upward

Much faster services speeds will be immediately available, but priced under term contracts for businesses, and residential customers with special needs.

IP Video will be immediately available at then current rates, as dictated by cable content providers. VoIP voice services are expected to be available by the time services are provisioned.

- f. For middle mile projects: This is not a middle mile project.
- g. A schedule by which the applicant intends to complete the components of the proposed project. The project period is up to 24 months.

If the grant application for the project is approved by May 2022, barring significant supply chain delays, Siren Telephone will use the following deployment schedule, based on similar projects it has completed:

April of 2023	Stage equipment
May of 2023	Bury new backbone, distribution and feeder fiber
June of 2023	Install electronics at subscriber locations
August 2023	Begin turn up of fiber-based customer services

3.2.3 Itemized Budget (all amounts should be rounded to the nearest dollar)

a. In addition to the Summary of Project Budget that is included as page 3, applicants should include a price list or quote for any equipment the applicant intends to purchase, including capital expenditures. The application should also indicate whether any facilities involved would be owned, rented, or leased.

Exhibit C – Construction Costs provides a summary of the construction costs for fiber network. Engineering, some construction and some installation will be performed by Siren Telephone Company employees and long-term third party contractors under contract and under supervisory control of Siren Telephone Company. Equipment expenditures are broken out in Exhibit C.

All network will be owned and managed by Siren Telephone Company.

b. The application must show that the grant, if awarded, will not subsidize the expenses of a telecommunications provider or the monthly bills of telecommunications customers. For purposes of this grant program, subsidize means a contribution to the operating costs, including profit, of the telecommunications provider.

The grant funds requested in this Application will only be used for authorized purposes.

The applicant will not subsidize its ongoing expenses or the monthly bills of telecommunications customers. It is understood that for purposes of this grant program, subsidy means a contribution to the recurring service charges, operating costs, including profit, of the telecommunications provider.

C. The application must show that the grant funds requested will be used for the sole purpose of constructing broadband infrastructure in the underserved areas covered by the application.

Construction of broadband infrastructure may include any of the following:

- Project planning that takes place during the performance period.
- Obtaining construction permits.
- Construction of facilities, including construction of both "middle mile" and "last mile" infrastructure.
- Installation and testing of the broadband service.

Siren Telephone Company affirmatively states that:

• All grant funds requested in this Application will be used for the sole purpose of constructing the proposed broadband infrastructure described in this Application.

Siren Telephone Company – FY2022 Broadband Expansion Grant Application – Webb Lake Fiber

- Siren will self-fund its contribution to this project's construction costs.
- All expenses incurred will be within the Award's Performance Period.

3.2.4 Priority factors supporting the application

- a. <u>Matching funds</u>. A description of the matching funds the applicant will invest in the proposed project, if any. For each element, indicate the type of match (cash, salary expense, or in-kind contribution). If the application is submitted by a partnership, identify the partner responsible for providing each element of the proposed matching funds. Note: The requirement for this information is satisfied via inclusion of the completed Funding Statement as page 4 of the application.
 - If available, provide documentation to support an offer of matching funds (minutes of a town board meeting, a letter from a prospective customer or local government official, etc.).
 - Matching funds contributions must be a firm commitment of funding to the project. Contributions that vary based on the amount of actual sales, customer contributions, or other criteria will not be given weight.

Matching contributions Siren will be \$473,850.50, which is 50% of total project costs of \$947,701.

- b. <u>Public-private partnerships</u>. If the public-private partnership is memorialized in a joint venture agreement or other writing, provide a copy of that agreement. If the partnership has not been reduced to a written agreement, provide a short description of the management role, financial commitment, or other contribution to the project for each participating partner.
 - In scoring this element, information regarding active engagement of diverse communities in the planning, permitting, or marketing of the project will be given weight as well.

Despite significant public interest and involvement by phone and video meetings, the current pandemic upset municipal schedules, and prevented completion of a Public Private Partnership in the allotted time frame.

- C. <u>Existing broadband service</u>. A list of the broadband service providers, if any, currently serving the area the applicant proposes to serve. In scoring this element, the following factors will be taken into account:
 - The degree to which the proposed project avoids duplicating existing broadband infrastructure.
 - The application of a wireless broadband service provider proposing significant overlap with existing broadband service in addition to service to an unserved area will not be given priority consideration.
 - Provide a list of all landline broadband service providers (DSL, cable or fiber to the home) and fixed wireless broadband service
 providers that overlap the footprint of the proposed broadband project.
 - If known, provide an estimate of the customers within the proposed footprint that are served by competing landline and fixed wireless broadband service providers, and the download/upload speeds offered by those competing service providers.
 - Provide a list of mobile wireless broadband service providers that overlap the footprint of the proposed project.
 - If known, provide an estimate of the customers within the proposed footprint that are served by competing mobile wireless broadband service providers, and the download/upload speeds offered by those competing service providers. (The presence of existing mobile wireless providers does not contribute to or affect the evaluation of existing broadband service in the project area for purposes of priority consideration, but provides a more complete picture of the broadband options available to residents.)

The Wisconsin Broadband Map shows incumbent landline provider CenturyLink advertising different speeds. There is a claim of providing 60/5 Mbps copper VDSL along a section of the north shore of Webb Lake. But subscribers in the area say these speeds are not available, suggesting that great portions of census blocks or tracts may be inaccurately coded.

T-Mobile terrestrial wireless internet is the other competitive carrier. Dense tree cover seems to be eliminating their ability to provide 25/3 Mbps service in any reliable fashion.

Cellular internet service is likewise advertised as available in some of the project area, with speeds not listed for us. This is not seen as a reliable substitute.

d. <u>Project impact</u>. A description of the geographic area and the population, both in terms of absolute numbers and likely users, which will be served by the proposed project. Indicate the number of anticipated residential and business customers in the project area, if known. Explain the speed and quality of internet service that will be available. Include information about the range of packages available for purchase. Provide details on any low-income access programs and steps the project will take to support adoption.

Current subscribers in the area feel portions of the proposed grant area are "unserved," therefore immediately leading to positive impacts for residents.

Some of the 124 existing lake homes surrounding Webb and Big Bear Lakes are ripe for conversion to full-year residences, but many are not currently used on a full-time basis. Many tell us they "can't stay during the week, because they can't work".

The area is also growing, but limited by the availability of construction and trades labor. This is especially common in the wake of the COVID-19 pandemic. Local contacts tell us that with existing crews, no more homes can be built before early 2023. They are labor constrained, despite much work available.

The primary project impact will be to bring year-around residency and an expansion of service and tourism business jobs to the lakes area. These lake properties are already sought after, but need the availability of dependable fiber-based broadband internet service. It's expected the impact would also spur further development of nearby shore areas, which would raise local tax bases and lead to further construction and jobs.

Local availability of high-speed internet services will boost local year-around population, created services and tourism jobs. These benefits result in local employment and income growth in and adjacent to the local community.

Secondary impacts of the project include the addition of first-time broadband for residential uses in this community, which leads to increasing and more stable population, and employment. The addition of dependable terrestrial cable TV and broadband connectivity will now be similar to that available in urban areas. Having access to fiber-based high-speed broadband will allow it to better compete for new residents and growing business.

Telecommunications Infrastructure will be significantly enhanced. This broadband project may spur the incumbent to offer new services to provide redundancy and at the same time additional broadband capabilities to least a generation to come.

- e. <u>Scalability</u>. A description of how the proposed project could expand or improve the broadband service it delivers, while maintaining the quality of its broadband service. This description should include specific projected increases in the following parameters that are known at the time of the application:
 - The number of users.
 - The number of network nodes.
 - The number of services provided.
 - The geographic area served by the project.

This description may also include a discussion of possible growth potential that is outside the commitment the applicant is making as part of its application.

This project is intended to give Siren Telephone Company a base for continued growth beyond its ILEC boundary into "internet deficient areas", leveraging its past successes with rural FTTH service delivery under the Wisconsin Broadband Expansion Grant Program.

Siren Telephone Company – FY2022 Broadband Expansion Grant Application – Webb Lake Fiber

This project is supported by the scalability of Siren Telephone Company's existing fiber-based infrastructure, and experience building both FTTH internet networks in rural Wisconsin.

The company continues its deployment of ultrafast broadband services over fiber facilities suitable for extremely high-speed symmetric broadband services. These always exceed the state's and the FCC's forward-looking definition of broadband services as 25/3 Mbps, as well as the 100/100 Mbps speeds associated with 2022-2024 ARPA and BEAD programs.

Siren's scalable expansion and improvements include these aspects:

- O Initial installation includes battery backup power where voice service has been requested, and availability when voice services are not requested. Siren abides by all regulatory guidelines for battery placement and replacement in its deployments.
- O Siren Telephone will match all FCC or PSCW guidelines for increases the speed of, or latency requirements of, its broadband services.
- Subscribers will ultimately be eligible for all extension of federal Lifeline benefits available to broadband service, and later to qualifying voice services. To do this, Siren Telephone would apply to the PSCW for Lifeline-Only ETC status beyond its ILEC footprint.
- o Full availability of Siren Telephone Company's IPTV-video product set.
- Near-term addition of VoIP voice telephone services, where traditional voice services are not depoloyed. It's important to note that Siren Telephone will not require that these broadband subscribers to simultaneously take a TDM voice product in order to receive broadband and video services. Siren Telephone will accommodate these subscribers' use of Wi-Fi calling over broadband derived from their CMRS wireless accounts, and all VoIP services they may subscribe to.

Through its earlier projects in and beyond its regulated service areas, Siren Telephone has proved it can manage successful customer growth.

- f. <u>Economic development</u>. A description of how the proposed project will promote job growth or retention, expand the property tax base or improve the overall economic vitality of the municipality or region. This description may be supplemented with a letter from one or more persons discussing the potential economic impact the project could have for that individual or business. In scoring this element, the following factors will be taken into account:
 - A discussion of potential economic impact the project could have for an individual business located in the project area.
 - An explanation of how an improved download and upload transmission speed could better support a specific business in the project area.
 - An explanation of the likely impact improved broadband service could have on residential property values, supported by local sales
 data if available
 - A demonstration of how improved broadband service to a residential portion of the project could benefit a telecommuting population.
 - A demonstration of how the speeds and service being offered by the project fits with current and future economic needs of the community and local businesses.

Webb and Big Bear Lakes stand out as popular rural Burnett County local communities. However, they are not unlike over a dozen other property areas nearby. The growth opportunity here could be duplicated several times over in these neighboring lake areas.

This is important because the economy of Burnett County has challenges. It ranked 51st of Wisconsin's 72 counties in median household and family income in the 2010 census. Even as

Siren Telephone Company – FY2022 Broadband Expansion Grant Application – Webb Lake Fiber

prospects improved, as late as October of 2019, the county ranks 66th in the state in unemployment—65 other Wisconsin counties currently experience lower rates of unemployment.

Broadband internet service availability is an engine of economic development that would bring yeararound residency, jobs and the multiplier effect of additional employment in service and tourism to benefit the entire county.

g. <u>Effect upon broadband service to adjacent areas</u>. A description of whether the proposed project will or will not impair the ability of a broadband service provider or competing broadband service provider to extend broadband service to areas adjacent to the proposed project area.

Siren does not believe the incumbent's broadband services to adjacent cares will be impaired in any way. There is no history or suggestion that incumbent facilities in or serving the proposed project area would, as a result, incur higher average costs per existing or forecasted subscriber. In fact, the absence of incumbent broadband service reported by subscribers in the application are suggests no facilities investment has been a consideration for the incumbent.

3.2.5 Other information supporting the application

- a. A description of applicant's history or experience constructing broadband communications facilities in the state and elsewhere.
 - If applicable, an applicant must comment upon the status of all prior broadband expansion grant projects, including the type of broadband technology used, the facility route actually built or installed, the number of residential and business customers actually connected, and other relevant details of the prior project(s).
 - An applicant must also comment on broadband construction projects undertaken in prior years that were not funded in part by the Broadband Expansion Grant program.

Siren Telephone Company has demonstrated its ability to plan, build and manage complex communications projects over its past 107 years.

The company that has built out 98% of its own regulated service area with fiber-to-the-home broadband service, on the way to 100%. This has been accomplished despite the major destruction of the company's narrowband copper network from the direct hit of an F3 tornado in June of 2001.

In addition to this experience, the company has also received significant praise for its:

- Siren's recent PSCW grant program experience suggests a 80%+ take rate on houses passed. Residents say they are able to remain later in the year at their seasonal residences, participate in work-at-home, and replace their dial-up service with gigabit-capable broadband services.
- Construction of three fiber rings providing redundant fiber connectivity to CMRS radio tower of AT&T Mobility and Verizon Wireless in and beyond its regulated service territories (Webster, Danbury, Webb Lake, Minong, Hertel, Sarona, Spooner). Delivering Gigabit Ethernet to these locations.
- Siren Telephone Company is one of just eight Wisconsin independents designated a Gigabit Provider of services, having invested in and provided services at the 1 Gbps level.

Siren Telephone Company has been the recipient of five previous Wisconsin Broadband Expansion Grants. It has built out those projects and achieved take rates above those anticipated.

b. A description of how the proposed project will or will not duplicate existing broadband infrastructure.

Siren Telephone Company does not duplicate existing broadband infrastructure. The Wisconsin intent to see broadly deployed broadband at speeds of at least 25/3 Mbps in the near future cannot be

Siren Telephone Company – FY2022 Broadband Expansion Grant Application – Webb Lake Fiber reliably achieved with the incumbent's existing equipment.

The areas in this application do not currently have fiber communications infrastructure. The existing copper infrastructure does not provide adequate broadband speeds today, but if new ways to use it do become a reality, the competition provided will be good for local residents and businesses in and outside of this census block.

C. A description of an applicant's financial ability to undertake the proposed broadband construction project. This may include information such as the number of years the company has been in operation, documentation of successful completion of similar infrastructure projects, evidence that sufficient funds are available to cover project expenditure and match, customer turn-over rates, and credit rating.

Hospitals are 15-30 miles distant from the proposed project area. Reasonably this is a half hour's journey by automobile, under optimal circumstance. But the introduction of fiber-based broadband enables faster and reliable access to healthcare services and providers in seconds. Remote diagnostic medicine and health maintenance services from pediatric to geriatric purposes become possible with simple laptop cameras and attached devices that are becoming commonly available. The costs of travel and ultimately stress on health practitioners quickly declines due to the availability of high speed broadband services.

d. For middle mile projects, state the terms under which the applicant will make its middle mile fiber resource available to last mile providers. Without disclosing project-specific or customer-specific negotiated rates for service or access, state whether access to the middle mile fiber resource will be offered to last mile providers at a rate that is reasonable and common to the industry. Describe any restrictions or limits that may limit the availability or interconnection with the middle mile route.

This is not a middle mile project

e. For middle mile routes, state the amount of fiber capacity, by number of fiber strands in a cable, that the applicant has been reserved for public use. Describe any commitment or tentative discussion indicating the local government or State agency that might use those fiber strands, and for what purpose. Describe any restrictions or limits that may limit the public use (e.g. a possible

This is not a middle mile project

- f. A description of how the proposed project will affect the ability of individuals to access health care service from home, including any impact upon the costs of those services.
 - Specific information from a hospital or clinic in the project area that currently uses or intends to use home-based telemedicine
 equipment to enhance access health care service would best illustrate this point.

High speed broadband access for the purposes of research and completing homework *at home* become possibilities if this application is accepted. As schools depend more and more on interactive distance learning and Internet access in real-time, the availability of high-speed broadband to students and those seeking vocational training will now be unencumbered by connection speed.

At the same time, local access to vocational and professional training doesn't exist, except by travel to a UW Extension classroom, or by the deployment of high speed broadband services, which open up a world-wide selection of options and opportunities.

Providing this connectivity significantly improves the return of this grant as an investment in Wisconsin's children and its workforce.

Siren Telephone Company – FY2022 Broadband Expansion Grant Application – Webb Lake Fiber

The Lakes area has a significant interest in Telemedicine visits for simple appoints and elderly patient monitoring. Winter plowing is irregular, so that driving and the current pandemic cause heightened need for fast broadband that can handle video for these visits.

- g. A description of how the proposed project will affect the ability of students to access educational opportunities from home.
 - Specific information on the likely number of students that will benefit from improved access to educational opportunities from home would be useful.
 - Specific information regarding educational programs that are currently available for students in the project area would be useful.

Providing this connectivity significantly improves the return of this grant as an investment in Wisconsin's children and its workforce

Increasing the availability of home fiber-based internet services gives rural Burnett county children advantages equal to those in larger school districts.

- h. A description of actions taken by a city, village, town, or county in support of the grant application that have not been discussed in the context of a public-private partnership above, including but not limited to:
 - The contribution of funds, easements or permissions to use publicly-owned real estate, construction materials, or other items of value to the grant project.
 - The contribution of in-kind assistance to the grant project in the form of waived fees and expenses for obtaining use permits and permissions.
 - The contribution of other items of benefit to the grant project, such as public outreach and education, vehicles, water, etc.
 - Certification as a Broadband Forward! Community or Telecommuter Forward! Community.

Siren Telephone Company continues to self-fund construction of broadband internet infrastructure whenever possible. This grant application speeds the company's expansion to an area that has few alternative providers. Discussions are underway to achieve both of these ordinances.

i. Letters and messages in support of the application submitted by prospective customers, local government officials, and other interested persons.

Please see Exhibit D - Letters of Support

- j. Any other equitable factor that the applicant desires to discuss, including one or more of the factors in Wis. Stat. § 196.03(6) that the applicant believes its project would advance. In discussing this element, the following information may be useful:
 - Technical support and training materials that the applicant intends to provide.
 - Information that the applicant intends to use to promote better broadband adoption and use.
 - A description of a program or outreach to provide assistance to individuals of low income.

Siren Telephone Co has successfully built out and turned up 5 PSC Broadband Expansion Grants. We do this 100% with fiber optic lines and fiber optic equipment, building our network fast, dependable, and future proof. Over our years of working with the PSC we have proven ourselves to be reliable, low maintenance and have an excellent record of turning up customers in underserved areas.

Burnett County is very supportive of our building fiber optic networks throughout the county. We have seen a substantial increase of year-round residents now that they can work and school from their rural homes.

Siren Telephone Company – FY2022 Broadband Expansion Grant Application – Webb Lake Fiber

This application has at its disposal the full engineering, operations and systems strength of Siren Telephone Company. That includes access to equipment and labor markets, consultants and capital markets the company has relied upon is past fiber builds.

This application does not impair the incumbent's ability to provide broadband services. Siren Telephone Company welcomes the incumbent to provide competing broadband services in this area since they will add to the options and growth of the local agricultural sector.

To the extent the incumbent does not add fiber nodes in the proposed project areas, it's important to note that this census block is surrounded on all four sides by "underserved" areas. The applicant believes there are plenty of nearby unserved areas open to the incumbent. In summary, the incumbent is not impaired in their broadband deployment business case by this application.

The incumbent's CAF II construction requirements arguably do not require fiber infrastructure, and can be satisfied by 10/1 Mbps service availability at any point in the coming five years, and not necessarily in these exchanges. It is difficult to imagine that having to compete for the 18 possible subscribers in the proposed project area could have a material impact on the incumbent's ability to meet its CAF II requirements.

It does not make sense that this project could have any impact on existing providers to significantly exceed the Commissions default 25/3 Mbps broadband definition in the next five years.

Exhibits

Exhibit A – Maps of the Proposed Service Area

Exhibit B – History of Siren Telephone Company

Exhibit C – Construction Costs

Exhibit D – Letters in Support of this Application

Exhibit A Map of the Proposed Webb Lake and Big Bear Lake Fiber Build

Overview shows locations of the initial 130 targeted current locations with local and mainline fiber strand counts

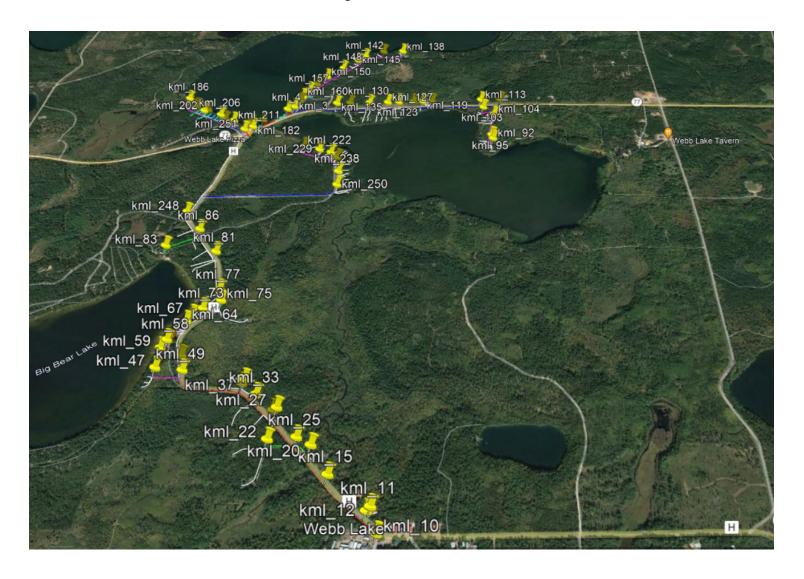


Exhibit B

History of Siren Telephone Company

Siren Telephone Company began offering service from a farmhouse on state Highway 70 near Viola Lake, in the year 1910. Service was available whenever members of the family were in the house to answer calls.

By 1957, Siren Telephone was serving 387 patrons in the Village of Siren Telephone, now the county seat. It was incorporated the following year.

Sid and Karen Sherstad, the 3rd generation of original owners took charge of the company in 1989.

In 2007, Siren Telephone was the second independent phone company in the state to offer fiber-to-the-home (FTTH), and since then has provided fiber connectivity to 94 percent of premises within its exchange.

In addition to traditional exchange services, Siren Telephone recently began offering non-regulated fixed WIMAX wireless services to communities north of its own in Burnett County. The 3, 5 and 10 Mbps services have been welcomed in CenturyLink areas having no access to reliable broadband services.

A FTTH expansion began last year into CenturyLink territory to the north of Siren Telephone's regulated exchange boundary. Siren Telephone has been offering fiber-based triple play service to new subscribers on the north side of Big Sand Lake. Siren Telephone has been experiencing an 80% take rate on houses passed. The current grant application is a facility extension of Sand Lake, where residents say they are able to remain later in the year at their seasonal residences, participate in work-at-home, and replace their dial-up service with gigabit-capable broadband services.

Exhibit C- Construction Costs Webb and Big Bear Lake Area Lake Fiber

SIREN TELEPHONE COMPANY 2023 - Webb LAKE AREA ESTIMATE UNITS

UNITS	ато	L&M	EXTENDED
SECTION BA BA4	5	93.00	465.00
SUB			485.00
SECTION BD			
BD5	95	506.00	27.830.00
SUB			27,830.00
SECTION BFO BFO 121	1.000	1.87	1.870.00
BFO 12W	2.500	3.13	7.825.00
BFO 241	4.500	1.87	8.415.00
BFO 24W	6,000	3.21	19,260.00
BFO 48I	2,500	2.03	5,075.00
BFO 48W	10,000	3.32	33,200.00
BFO 961	2,000	2.31	4,620.00
BFO 96W BFO 144I	5,500	3.60	19,800.00
BFO 144W	2,000 7,000	2.95 4.40	5,900.00 30.800.00
BFOV(1x1.25)	11,000	13.50	148,500,00
8UB	43,000	13.30	285,285,00
			200,200.00
SECTION BH			
BHF (30X48X24)	25	1,815.00	45,375.00
SUB			45,375.00
SECTION BM			
BM101	1	1.760.00	1.760.00
BM2(5/8)(10)	210	100.00	21,000.00
BM53	10	82.50	825.00
BM60(1x1.25)	6,000	13.53	81,180.00
BM61(0)	500	12.00	6,000.00
BM72 & 73	50	110.00	5,500.00
BM83	130	35.20	4,576.00
SUB			120,841.00
SECTION HEF & HO			
HBFO (SK)	55	490.00	26,950.00
HBFO (L)	25	968.00	24,200.00
H01	800	45.00	36,000.00
SUB			87,160.00
SECTION ONT			
ONT(5)	130	143.00	18.590.00
SUB	1.50	172,00	18.690.00
SECTION SE			
SEBO 4	32,000	3.92	125,440.00
SEBO 4T	9,000	7.00	63,000.00
SEBO 12	2,000	4.84	9,680.00
SEBO 12T SUB	500	8.14	4,070.00 202,190.00
WWW.			202, 100.00
TOTAL			787,708.00
Fiber Construction	285,265	ENGINEEDI	NG 110,280.00
Directional Boring	120,841	LINGINEERI	Ind
Pedestals & Handholes		Grand total	\$897,888.00
Splicing and Testing	105,740		
Fiber Drops	202,190		

		SIRE	N TELEPHON	E COMPANY		
2023 - WEBB LAKE AREA						
UNITS	QTD	LABOR	MATLS	L&M	EXTENDE	
SIREN ELECTRONICS						
NID (CLAMSHELL)	130	-	16.90	16.90	2,197.00	
ADTRAN ONT	130	-	60.00	60.00	7,800.00	
Remote Cabinet with Adtran she	1	-	12,000.00	12,000.00	12,000.00	
Clearfield Cross Connect box	1	-	8,003.00	8,003.00	8,003.00	
EQUIPMENT SUBTOTAL					30,000	
CONTRACTOR SUBTOTAL					897,986	
SIREN PROJECT LABOR					19,715	
WEBB LAKE PROJECT TOTAL					947,701	

Exhibit D

Community Letters of Support



BURNETT COUNTY ADMINISTRATION AND HUMAN RESOURCES

Burnett County Government Center 7410 County Road K, #116 Siren, WI 54872 D: 715.349.2181 | F: 715.349.2180

Nathan Ehalt County Administrator Judy Cornelison Fiscal Manager Jenelle Lindquist Fiscal Specialist Stacy Gaffney Senior Human Resources Advisor Brent Halbersma Payroll & Benefit Specialist

February 23, 2022

Public Service Commission of Wisconsin North Tower, Sixth Floor Hills Farm State Office Building 4822 North Madison Yards Way Madison, WI 53705

To whom it may concern,

The Burnett County Board of Supervisors is very supportive of Siren Telephone's grant application for a W-PSC Broadband Grant in Burnett County.

As you are aware broadband services provide critical infrastructure for rural communities and is essential to the health and vitality of our community. Our businesses need high speed, reliable and secure broadband access in order to continue to operate, expand and remain competitive. Our schools rely upon broadband for information and to attain necessary knowledge to ensure educational requirements are being met. Medical and health care providers require the bandwidth only fiber can provide to allow for necessary tele-medicine options. All these areas have been further highlighted as a result of the on-going pandemic.

In addition, expanding high speed internet access to our residential homes is necessary to maintain and expand economic activity for our County. As we have seen throughout the pandemic, more and more employees have been able to work remotely, thus allowing communities to capture more economic revenue vs. having those dollars spent in urban areas that already enjoy more economic activity. Capturing such revenue is critical to the long term vitality of rural areas. During the course of the pandemic Burnett County has seen an increase in our secondary home owners spending additional time and resources in Burnett County. This time translates into greater economic activity within our County.

A successful application by Siren Telephone will expand fiber to the home in the Town of Webb Lake, a very remote, and underserved area of Burnett County, but an area with a significant number of secondary homes.

We appreciate your support of Burnett County and strongly encourage you to approve Siren Telephone's grant application.

Sincerely

Nathan Ehalt



School District of Webster * P.O. Box 9 * Webster, WI 54893 www.webster.k12.wi.us

February 28, 2022

Dear PSC Broadband Grant Selection Committee.

I am writing this letter on behalf of the Webster School District and in strong support of the Siren Tel. Co. PSC Broadband Grant application. I am in my 2nd year as a superintendent and from the day I started, it was clear that we had significant broadband and connectivity issues. Webster School District is made up of roughly 550 square miles of rural and wooded landscape. It is one of the largest square mile districts in Wisconsin. As you can imagine, in Northern Wisconsin, there are many students who do not have access to the internet or financial means to get internet access. We also have families that do not have access to cell service as there are only limited towers in our area. We have approximately 630 students and roughly 64 percent of our population that receive free and reduced lunch. We also have a 17 percent Native American population with a Reservation within our District boundaries. The median family income in the Webster School District is \$24,091 which is well below the median income for our State (\$59,209).

This struggle with connectivity has impacted many of our students as well as some of our teaching staff. When schools closed in March 2020 due to COVID-19, many students did not have access to educational materials or their teachers. Webster staff had to use the postal service and district buses to deliver learning packets to our students.

It is hard working in the 21st-century with 20th-century connectivity. I have been reaching out to whoever would listen and develop partnerships to improve connectivity. In educating our students, it is so important for our staff to be able to reach all of our students. This school year we continue to offer in-person learning which is the best option for our District, but frequently throughout the year, our students have had to quarantine due to COVID-19. To this day, when students are isolated with COVID-19, we struggle to keep students connected to reduce the learning loss. We continue to have teachers struggle with contacting students when they are isolated as they do not have phones or the internet. Last year, we had to close our facilities and switched to remote learning for two weeks due to infection rates and quarantining staff and students. With the new Omicron variant and any potential other variants tol come, it is important to continue to work on our connectivity issues for the above mentioned.

I am so thankful that Sirentel has agreed to assist us in the venture and has already started installing fiber within a small part of our 550 square mile school district. I am hopeful that they will be selected for this new round of grant which will help serve much of our underserved community.

Please do not hesitate to reach out with any questions or concerns.

eff Fimreite, Superintendent



Town of Webb Lake 31000 Namekagon Road Webb Lake, WI 54830 715-259-7139

March 11, 2022

RE: Broadband Expansion Grant

To Whom it May Concern:

At the Town's March 7th, 2022 meeting the Town Board of Webb Lake discussed the possibility of Siren Telephones expansion of fiber optic. Currently our Fire Department utilizes this service and has found it to be extremely reliable to date and also reasonable in cost.

It was felt that having a local provider of broadband fiber optic for our entire community is imperative for connectivity. Having a local presence and provider will be extremely advantageous and frankly necessary for our residents.

In our area the demand continues to grow, from not only long time existing residents, but from new folks coming to our town. On a regular basis folks are contacting the township asking about provider options – this illustrates the real need. It is essential we have options to allow people to be educated and work from our area. It is imperative for competitiveness for the community, and fairness for all our residents, to have reliable access.

We will be more then willing to be cooperative with Siren Telephone during the installation phase.

The entire Town Board - Chair Steve Austin and Board of Supervisors Greg Main and John Kielkucki – have unanimously expressed support for this expansion of service and requested that I send along a letter of support on their behalf.

Thankfully,

John Basill Clerk

On behalf of the

Town of Webb Lake



OFFICE OF THE

Burnett County Development Association

County Government Center 7410 County Road K, #120 Siren, WI 54872

Richard Hartmann Economic Development Director

Phone: 715-349-2979 Cell: 715-566-0021

November 20, 2020

Public Service Commission of Wisconsin North Tower, Sixth Floor Hills Farm State Office Building 4822 North Madison Yards Way Madison, WI 53705

Letter of Support for a Broadband Expansion Grant: Siren Telephone Company, Inc. 7723 West Main Street – P.O. Box 436 – Siren, WI 54872

The Burnett County Development Director and the Burnett County Development Association (BCDA) are very supportive of Siren Telephone's grant application for a W-PSC Broadband Expansion Grant here in Burnett County. The BCDA is a county wide, non-profit development organization that creates economic opportunities for residents, businesses, and communities of Burnett County.

Broadband services are critical to support multiple facets within the County. Our businesses need high speed, reliable and secure broadband access in order to continue to operate, expand, and remain competitive. Our schools require that students use of a reliable connection with fast down and uploads of information in order to attain necessary knowledge and understanding to complete their educational requirements. Medical and health care providers of Burnett County would be able to allow for more efficient communication and treatment of patients. These facets have been even more critical as a result of the on-going Coronavirus pandemic.

Another important aspect for expanding and improving broadband here, is there is an increasing demand from teleworkers for speed and efficiency of broadband services. Burnett County as a border county with the State of Minnesota and the close proximity of the Twin Cities (Minneapolis/St. Paul) metro area and because the county is rich in natural resources and recreational opportunities have numerous second homes. There is an influx of second home owners many of whom own or operate businesses in the Twin Cities. Burnett County is one of the poorest counties in the state. We see investment in broadband as a key piece of infrastructure to grow jobs and income.

Sincerely

Richard F. Hartmann

Economic Development Director - Burnett County

whinrichs@burnettcounty.org



School District of Webster ♦ P.O. Box 9 ♦ Webster, WI 54893 www.webster.k12.wi.us

Dear Broadband Grant Selection Committee,

I am writing this letter on behalf of the Webster School District and in strong support of the Siren Tel. Co. PSC Broadband Grant application.

Webster School District is made up of roughly 600 square miles of rural and wooded landscape. It is one of the largest square mile districts in Wisconsin. As you can imagine, in Northern Wisconsin, there are many students who do not have access to the internet or financial means to get internet. We also have families that do not have access to cell service as there are only limited towers in our area. We have approximately 630 students and roughly 64 percent of our population that receive free and reduced lunch. We also have a 17 percent Native American population with a Reservation within our District boundaries. The median family income in the Webster School District is \$24,091 which is well below the median income for our State (\$59,209).

I am a new superintendent and from the day I started, it was clear that we had a broadband and connectivity issue which impacts our student population. As I learned about the District, I learned that when schools closed in March, many students did not have access to educational materials or their teachers. Webster staff used the United States Post Office and busing service to deliver packets to our students. Some teachers shared with me that they had no contact with students over the entire three month period as some families do not have phones or the internet. It is hard working on 21st-century education with 20th-century connectivity. I have been reaching out to whoever would listen and develop partnerships to improve connectivity and so our staff can reach all of our students.

In-person learning is our best option for our District but most recently due to COVID-19 infections in our county, we had to switch to virtual learning. I am so thankful that Sirentel has agreed to assist us in the venture and has already started installing fiber within a small part of our District. I am hopeful that they will be selected for this grant which will help serve much of our underserved community.

Please do not hesitate to reach out with any questions or concerns,

Best wishes

Jeff Fimreite, Superintendent